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SEQ ID NO : 1

## Human IL-15 wild-type mature IL-15 (CDS from 373 to 861)

**FIGURE 1A**

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1	NWVNVISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLEL <b>QVI</b>	<b>52</b> SLESGDASIH
61	DTV <b>E</b> NLIILA	<b>64</b> <b>69</b> NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

**SEQ ID NO :2****Human wild-type mature IL-15****FIGURE 1A (end)**

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**peptide 1:**

646	672	
ctc ttg gag tta caa gtt att tca ctt		<u>SEQ ID NO:3</u>
45	51 52	
<b>L L E L Q V I S L</b>		<u>SEQ ID NO:4</u>

**peptide 2:**

706	720	
gaa aat ctg atc atc		<u>SEQ ID NO:5</u>
64 65 68		
<b>E N L I I</b>		<u>SEQ ID NO:6</u>

**peptide 2a:**

706	723	
gaa aat ctg atc atc cta		<u>SEQ ID NO:66</u>
64 65 69		
<b>E N L I I L</b>		<u>SEQ ID NO:67</u>

**FIGURE 1B**

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45                    51 52  
peptide 1 : L L E L Q V I S L                    SEQ ID NO :4

-----mutant peptides-----

L D E L Q V I S L	<u>SEQ ID NO :7</u>
L E E L Q V I S L	<u>SEQ ID NO :8</u>
L K E L Q V I S L	<u>SEQ ID NO :9</u>
L R E L Q V I S L	<u>SEQ ID NO :10</u>
L L E L Q V I D L	<u>SEQ ID NO :11</u>
L L E L Q V I E L	<u>SEQ ID NO :12</u>
L L E L Q V I K L	<u>SEQ ID NO :13</u>
L L E L Q V I R L	<u>SEQ ID NO :14</u>
L L E L Q V I S D	<u>SEQ ID NO :15</u>
L L E L Q V I S E	<u>SEQ ID NO :16</u>
L L E L Q V I S K	<u>SEQ ID NO :17</u>
L L E L Q V I S R	<u>SEQ ID NO :18</u>

Figure 2A

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peptide 2 :      64 65 68  
                  E N L I I      SEQ ID NO : 6

-----mutant peptides-----

K N L I I	<u>SEQ ID NO : 19</u>
R N L I I	<u>SEQ ID NO : 20</u>
E D L I I	<u>SEQ ID NO : 21</u>
E E L I I	<u>SEQ ID NO : 22</u>
E K L I I	<u>SEQ ID NO : 23</u>
E R L I I	<u>SEQ ID NO : 24</u>
E N L I D	<u>SEQ ID NO : 25</u>
E N L I E	<u>SEQ ID NO : 26</u>
E N L I K	<u>SEQ ID NO : 27</u>
E N L I R	<u>SEQ ID NO : 28</u>

Figure 2B

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1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLDELQVI	SLESGDASIH
61	DTVENLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

L45D SEQ ID NO :29

1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFL <b>EEL</b> QVI	SLESGDASIH
61	DTVENLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

L45E SEQ ID NO :30

FIGURE 2C

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1	NWVNVISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLKELQVI	SLESGDASIH
61	DTVENLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

L45K SEQ ID NO :31

1	NWVNVISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLRELQVI	SLESGDASIH
61	DTVENLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

L45R SEQ ID NO :32

FIGURE 2C (continued)

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1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	<b>D</b> LESGDASIH
61	DTVENLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

**S51D SEQ ID NO : 33**

1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	<b>E</b> LESGDASIH
61	DTVENLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

**S51E SEQ ID NO : 34**

**FIGURE 2C (continued)**

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1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	KLESGDASIH
61	DTVENLIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

S51K SEQ ID NO : 35

1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	RLESGDASIH
61	DTVENLIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

S51R SEQ ID NO : 36

FIGURE 2C (continued)

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1 NWVNVIISDLK KIEDLIQSMH IDATLYTESD  
31 VHPSCKVVTAM KCFLLELQVI SDESGDASIH  
61 DTVENLIIILA NNSLSSNGNV TESGCKECEE  
91 LEEKNIKEFL QSFVHIVQMF INTS

L52D SEQ ID NO :37

1 NWVNVIISDLK KIEDLIQSMH IDATLYTESD  
31 VHPSCKVVTAM KCFLLELQVI SEESGDASIH  
61 DTVENLIIILA NNSLSSNGNV TESGCKECEE  
91 LEEKNIKEFL QSFVHIVQMF INTS

L52E SEQ ID NO :38

FIGURE 2C (continued)

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1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SKESGDASIH
61	DTVENLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

L52K SEQ ID NO :39

1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SRESGDASIH
61	DTVENLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

L52R SEQ ID NO :40

FIGURE 2C (end)

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1	NWVNIVISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVKNLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

E64K SEQ ID NO :41

1	NWVNIVISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVRNLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

E64R SEQ ID NO :42

FIGURE 2D

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1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVEDLIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

N65D SEQ ID NO :43

1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVEELIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

N65E SEQ ID NO :44

FIGURE 2D (continued)

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1	NWVNIVISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVEKLIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

N65K SEQ ID NO :45

1	NWVNIVISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVERLIIILA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

N65R SEQ ID NO :46

FIGURE 2D (continued)

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1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVENLIDLA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

I68D SEQ ID NO :47

1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVENLIELA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

I68E SEQ ID NO :48

FIGURE 2D (continued)

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1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVENLIKLA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

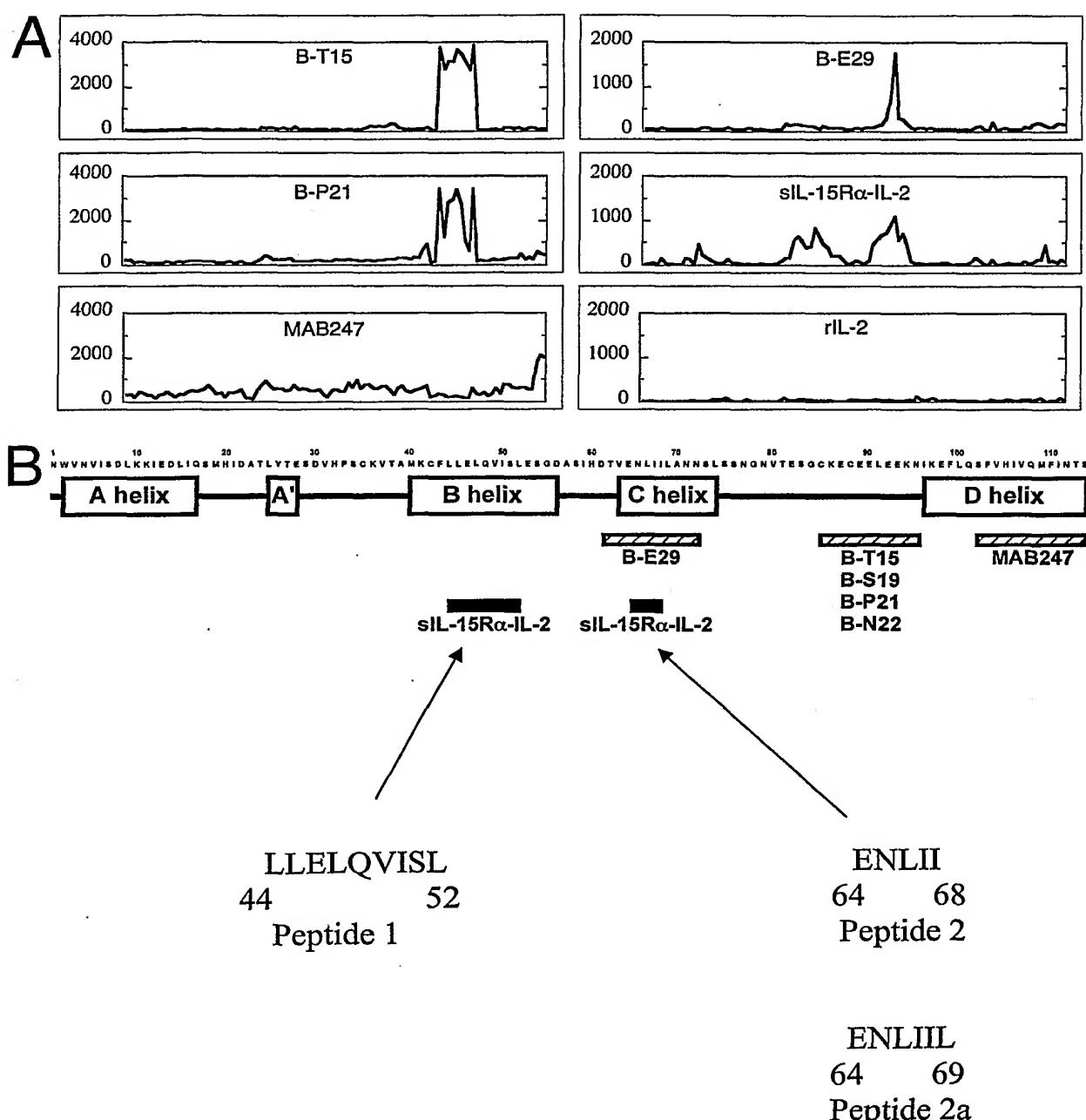
I68K SEQ ID NO :49

1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVENLIRLA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

I68R SEQ ID NO :50

FIGURE 2D (end)

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**FIGURES 3A and 3B**

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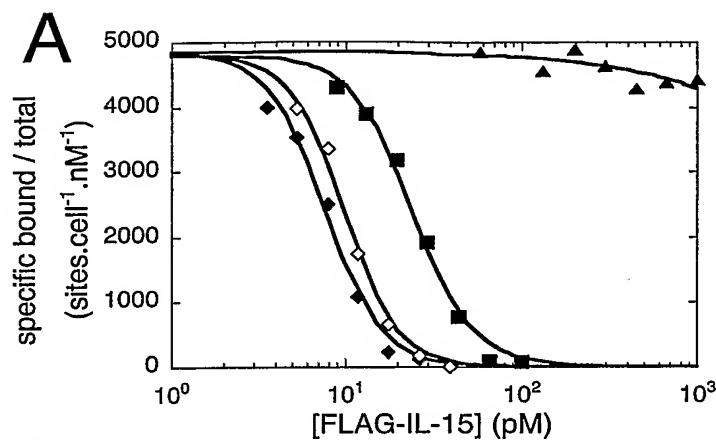


FIGURE 4A

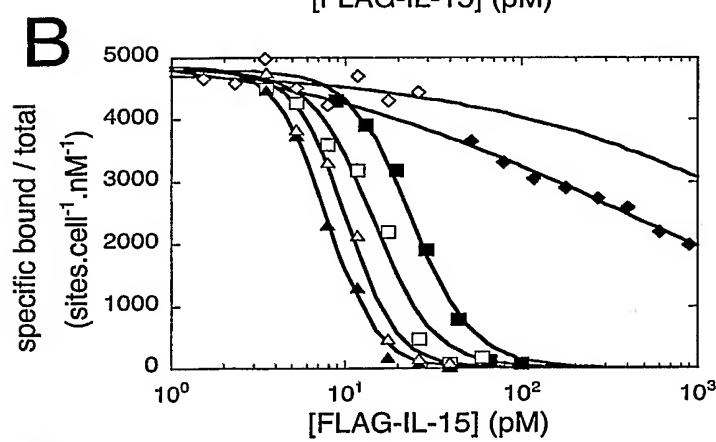


FIGURE 4B

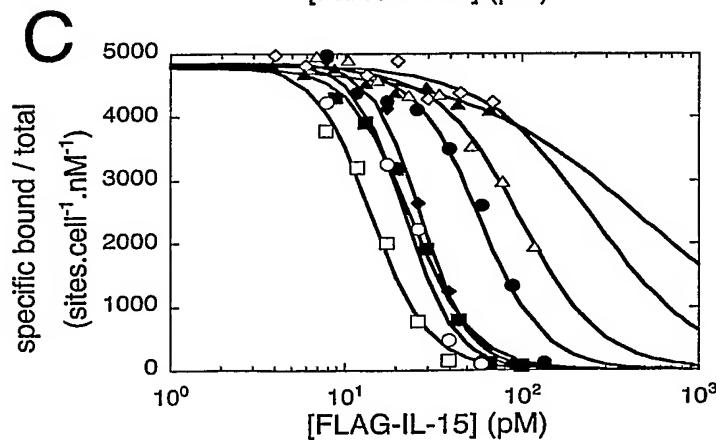


FIGURE 4C

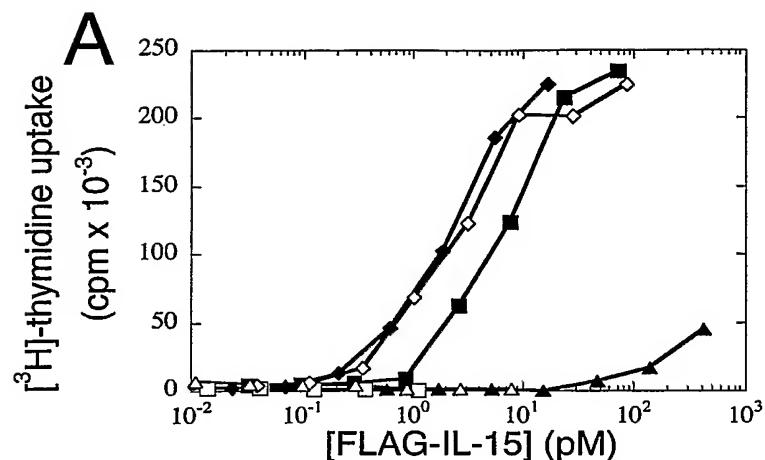


FIGURE 5A

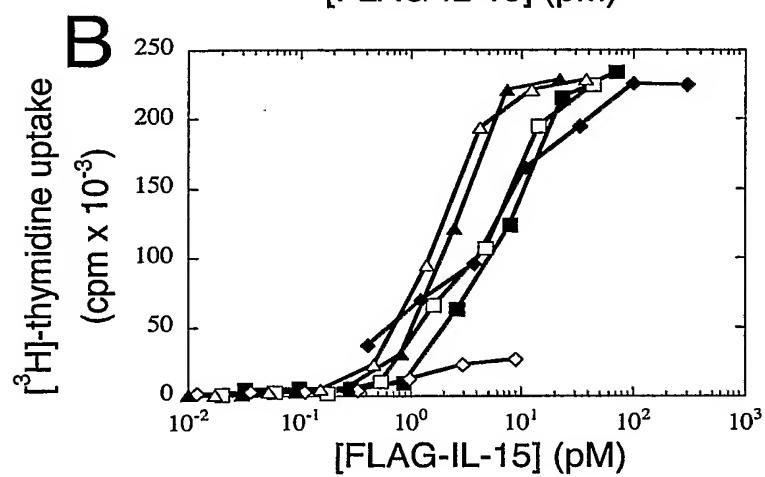


FIGURE 5B

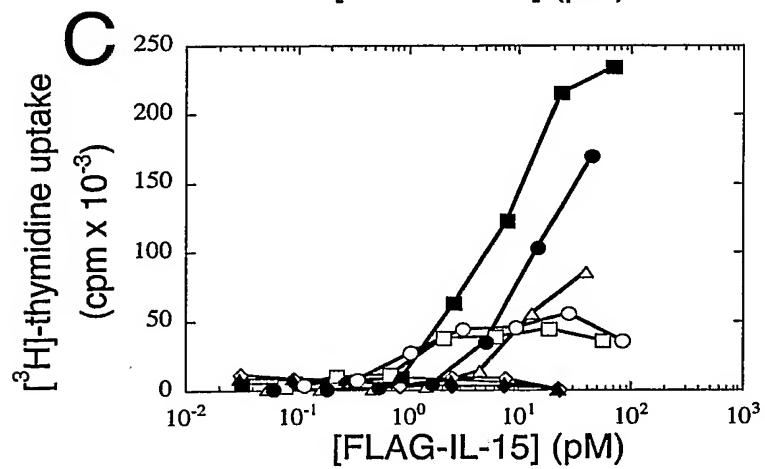


FIGURE 5C

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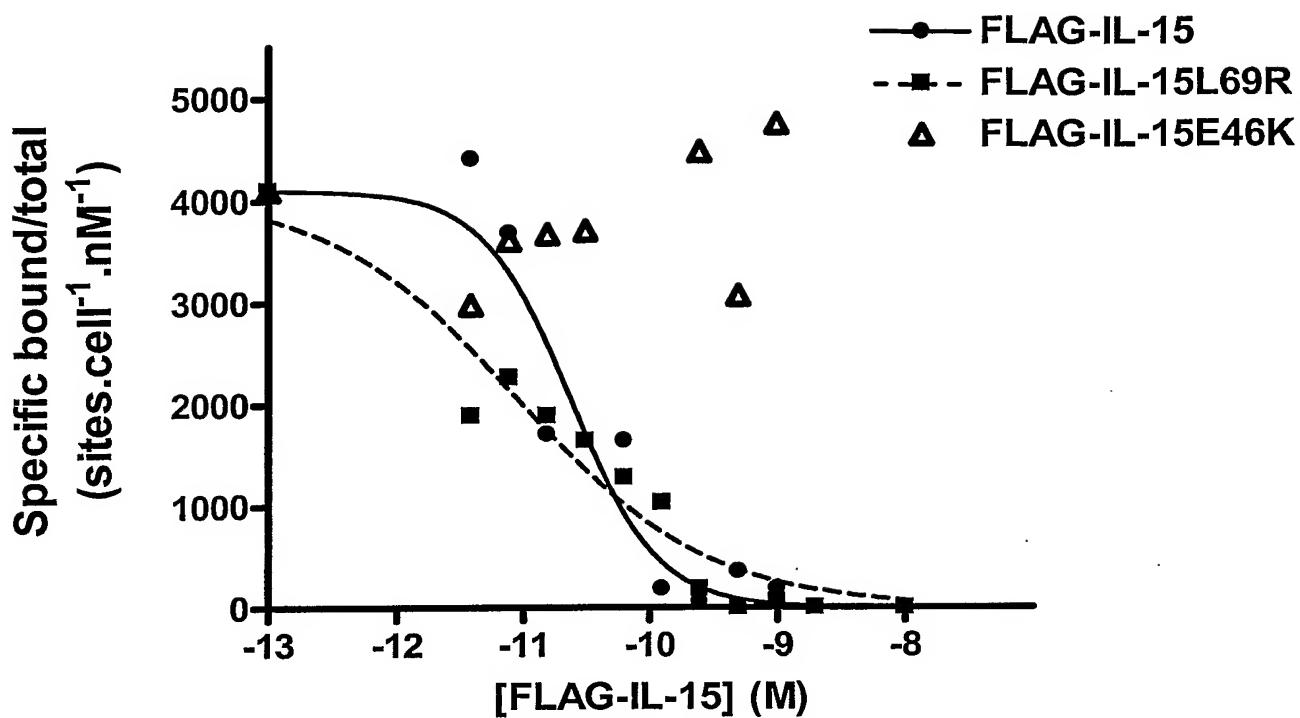
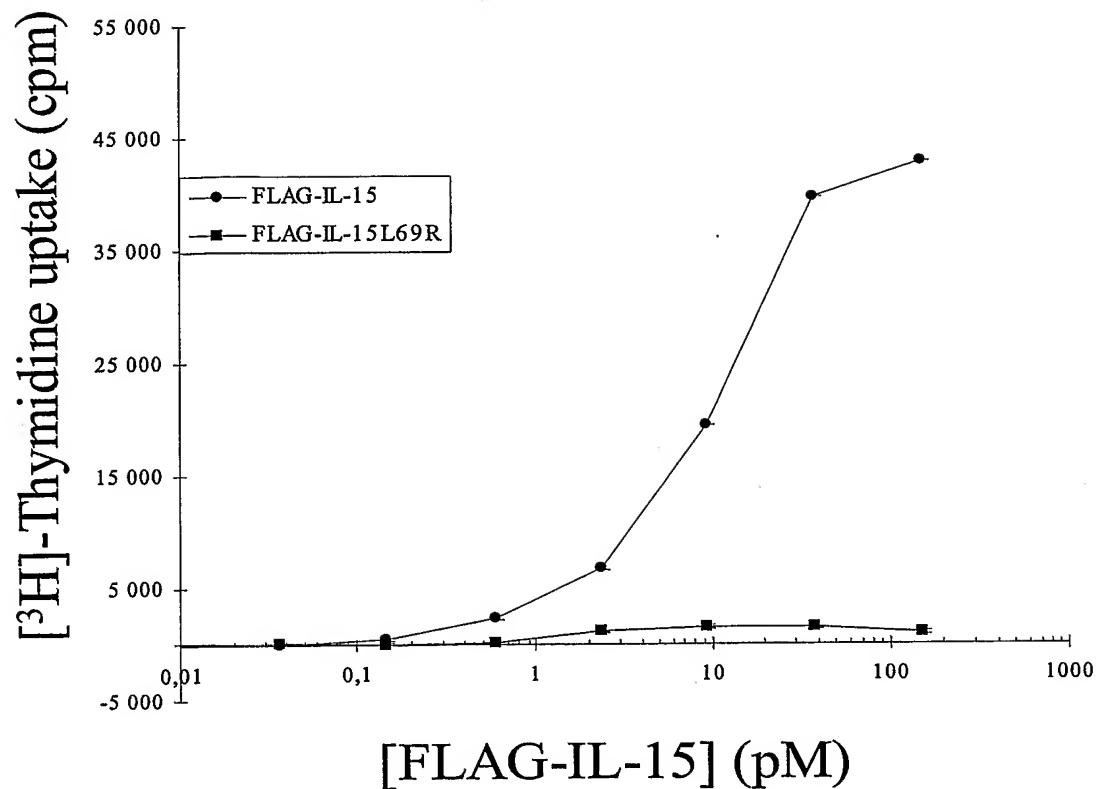


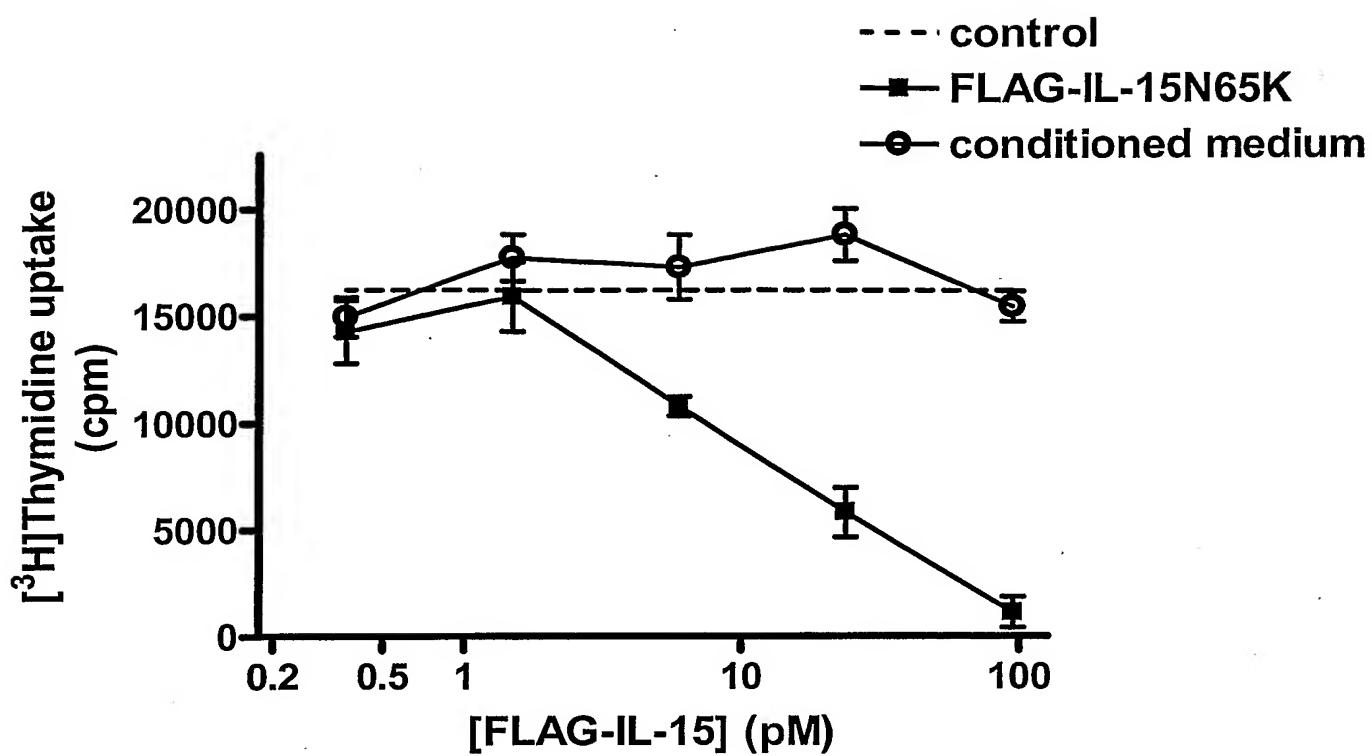
FIGURE 6

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**FIGURE 7**

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**FIGURE 8**

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64 65 68 69  
peptide 2 : E N L I I L SEQ ID NO : 67  
-----  
mutant peptides-----

K N L I I L	<u>SEQ ID NO : 68</u>
R N L I I L	<u>SEQ ID NO : 69</u>
E D L I I L	<u>SEQ ID NO : 70</u>
E E L I I L	<u>SEQ ID NO : 71</u>
E K L I I L	<u>SEQ ID NO : 72</u>
E R L I I L	<u>SEQ ID NO : 73</u>
E N L I D L	<u>SEQ ID NO : 74</u>
E N L I E L	<u>SEQ ID NO : 75</u>
E N L I K L	<u>SEQ ID NO : 76</u>
E N L I I D	<u>SEQ ID NO : 77</u>
E N L I I E	<u>SEQ ID NO : 78</u>
E N L I I K	<u>SEQ ID NO : 79</u>
E N L I I R	<u>SEQ ID NO : 80</u>
E N L I R L	<u>SEQ ID NO : 81</u>

**FIGURE 9**

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1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVENLIIDA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

L69D SEQ ID NO : 82

1	NWVNVIISDLK	KIEDLIQSMH	IDATLYTESD
31	VHPSCKVTAM	KCFLLELQVI	SLESGDASIH
61	DTVENLIIEA	NNSLSSNGNV	TESGCKECEE
91	LEEKNIKEFL	QSFVHIVQMF	INTS

L69E SEQ ID NO : 83

FIGURE 10

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1 NWVNVIISDLK KIEDLIQSMH IDATLYTESD  
31 VHPSCKVVTAM KCFLLELQVI SLESGDASIH  
61 DTVENLIIKA NNSLSSNGNV TESGCKECEE  
91 LEEKNIKEFL QSFVHIVQMF INTS

L69K SEQ ID NO :84

1 NWVNVIISDLK KIEDLIQSMH IDATLYTESD  
31 VHPSCKVVTAM KCFLLELQVI SLESGDASIH  
61 DTVENLIIRA NNSLSSNGNV TESGCKECEE  
91 LEEKNIKEFL QSFVHIVQMF INTS

L69R SEQ ID NO :85

FIGURE 10 (end)